



A Rare Case: Scrotal Hemangioma

Nadir Bir Olgu: Skrotal Hemanjiom

İ Emin Cenar COŞKUN, İ Muzaffer AKÇAY, İ Abdullah İLKTAÇ, İ Fatih GEVHER, İ Yusuf Özlem İLBAY

Bezmialem Vakıf University Faculty of Medicine, Department of Urology, İstanbul, Türkiye

ABSTRACT

Hemangioma is a common soft tissue tumor. Scrotal hemangioma is a very rare benign vascular lesion. There are approximately 55 cases reported so far in the literature. It can cause bleeding, ulceration, pain and aesthetic complaints. Some authors have reported that it may even cause infertility. We presented a case of a 30-year-old male patient who was admitted to the urology clinic with the complaint of a testicular mass which he stated had been present since birth. On physical examination, vascular structures with a mass of approximately 10 cm were observed, filling more than half of the left hemiscrotum. These structures were painless on palpation and externally ecchymotic. On magnetic resonance imaging, as the primary diagnosis, cavernous hemangioma originating from the scrotum wall was considered. Then, the patient underwent excisional surgery under general anesthesia. The pathology result was reported as venous hemangioma. No complications were observed in the follow-ups. After a successful surgical approach, it was observed that the sexual performance of the patient also increased.

Keywords: Cavernous hemangioma, testicular mass, scrotal hemangioma

ÖZ

Hemanjiom, yaygın bir yumuşak doku tümörüdür. Skrotal hemanjiom ise çok nadir gözlenen benign bir vasküler lezyondur. Literatürde şimdiye kadar bildirilen yaklaşık 55 olgu bulunmaktadır. Skrotal hemanjiom estetik şikayetlerin yanı sıra kanama, ülserasyon ve ağrı gibi şikayetlere de neden olabilir. Bazı yazarlar, infertiliteye bile sebep olabileceğini bildirmiştir. Olgumuz, 30 yaşında bir erkek hastaydı. Kliniğimize doğumdan itibaren mevcut olduğunu ifade ettiği testiste kitle şikayeti ile başvurdu. Yapılan fizik muayenede sol hemiskrotumun yarısından fazlasını dolduran, palpasyonla ağrısız, haricen ekimotik, yaklaşık 10 cm'lik vasküler yapılar gözlemlendi. Manyetik rezonans görüntüleme ön planda skrotum duvar kaynaklı kavernoöz hemanjiom düşünüldü. Ardından hastaya genel anestezi altında eksizyonel cerrahi uygulandı. Patoloji sonucu, venöz hemanjiom ile uyumlu olarak neticelendi. Takiplerinde herhangi bir komplikasyon gözlenmedi. Başarılı bir cerrahi yaklaşım ardından hastanın cinsel performansının da yükseldiği gözlemlendi.

Anahtar Kelimeler: Kavernoöz hemanjiom, testiste kitle, skrotal hemanjiom

Introduction

Hemangioma is a common soft tissue tumor. Testicular cavernous hemangioma is a very rare benign vascular lesion (1,2). There are approximately 55 cases reported so far in the literature (3). In this case report, a patient with scrotal hemangioma is discussed.

Case Report

A 30-year-old male patient was admitted to the urology clinic with a testicular mass, which had been present since birth. However,

he stated that he was disturbed recently due to the lack of visual aesthetics and scrotal bleeding. No significant feature was found in the patient's history and family history. On physical examination, vascular structures with a mass of approximately 10 cm were observed, filling more than half of the left hemiscrotum, crossing the raphe and extending to a part of the right hemiscrotum. These structures were painless on palpation and externally ecchymotic (Figure 1). Routine urinalysis, complete blood count, coagulation parameters, alpha-fetoprotein level, beta-human choriogonadotropic hormone level and kidney function

Address for Correspondence: Emin Cenar Coşkun, Bezmialem Vakıf University Faculty of Medicine, Department of Urology, İstanbul, Türkiye
E-mail: emincenancoskun@gmail.com **ORCID ID:** orcid.org/0000-0002-3450-2151

Received: 16.05.2023
Accepted: 23.01.2024

Cite this article as: Coşkun EC, Akçay M, İlktaç A, Gevher F, İlbey YÖ. A Rare Case: Scrotal Hemangioma. Bezmialem Science. 2024;12(4):479-81



©Copyright 2024 by Bezmialem Vakıf University published by Galenos Publishing House.
Licenced by Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 (CC BY-NC-ND 4.0)

tests were normal. Scrotal magnetic resonance imaging (MRI) was performed to exclude possible testicular tumors. On MRI, a lobulated contoured lesion that completely involved the left hemiscrotum wall was observed with the largest dimensions of 120x77x78 mm. Cavernous hemangioma originating from the scrotum wall was considered as the primary diagnosis (Figure 2). Then, the patient underwent excisional surgery under general anesthesia. As a result of pathology; different sized, dilated, thick-

walled, valve-containing vascular proliferation was observed in the entire dermis. In these vessels, erythrocytes and proteinous material were observed, and some of them had organized and calcified thrombi. Venous hemangioma was considered in the foreground. In the post-op 3rd month control, the wound healed well and the patient did not have any complaints (Figure 3). Informed consent was obtained.

Discussion

Scrotal hemangiomas are congenital and usually painless benign vascular lesions (4). There are approximately 55 cases reported so far in the literature (3). Complications can be listed as hemorrhage especially in deep scrotal hemangioma, rectal bleeding and hematuria due to the spread of the lesion to surrounding tissues such as rectum or bladder, ulceration, infection, pain, and negative effect on spermatogenesis due to increased intrascrotal temperature (5-7). Since its complications are not observed frequently, it does not attract much attention unless it causes aesthetic problems until adolescence (8). Although the etiology of hemangiomas is not clear, they may cause discomfort due to local compression. Therefore, treatment is important after diagnosis (3).

In the diagnosis of scrotal hemangioma, MRI is important (3). Because, it is non-invasive and gives information about the dimensions, borders and the characteristics of the lesion.



Figure 1. Preoperative image

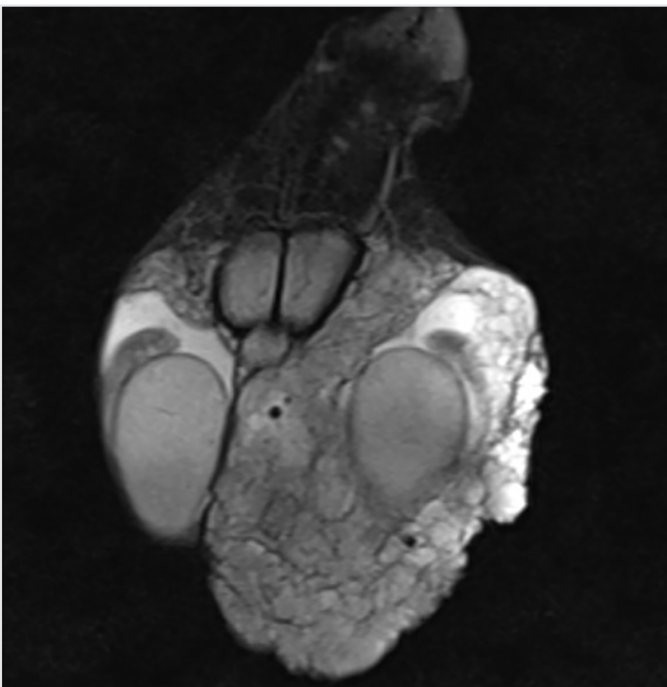


Figure 2. Scrotal MRI image
MRI: Magnetic resonance imaging



Figure 3. Postoperative image

Hemangiomas are important in the differential diagnosis of testicular tumors. Besides testicular tumors; inguinal hernia, cord lesions, and epididymal lesions should not be ignored in the differential diagnosis (4). The general approach in treatment is surgical removal of the lesion, especially in large lesions. Vascular lesions should not be excised before reaching the clean surgical margin and attention should be paid to vascular rupture and hemorrhage during surgery (4). Other treatment options include; intralesional sclerotherapy, laser fulguration, and cryotherapy (9). There is no consensus on the effect of scrotal hemangioma on infertility. Although it is accepted by some authors, that it does not pose a risk in terms of infertility due to the testis and epididymis are not being affected (4), it has been stated by some authors that it may cause infertility in the long term (10). According to Gotoh et al. (5) and Stahl et al. (6), testicular damage and azoospermia can be observed due to increased temperature as a result of scrotal hemangioma. Sexual health is crucial in sexually active individuals with scrotal hemangioma, as it can cause bleeding, pain and aesthetic discomfort. There are not many studies in the literature that investigate the effects of scrotal hemangioma on sexual health. Our patient was married and sexually active. He had no complaints about erection and ejaculation. Preoperative International Index of Erectile Function (IIEF) score was found to be 22. In the postoperative third month controls, the IIEF score was calculated as 26. The patient's wife was also interviewed. She stated that she was more satisfied with her sexual life because her husband had a more aesthetic appearance after the operation and scrotal bleeding stopped.

Ethics

Informed Consent: Informed consent was obtained.

Footnotes

Authorship Contributions

Surgical and Medical Practices: E.C.C., M.A., Concept: E.C.C., M.A., A.İ., Y.Ö.İ., Design: M.A., A.İ., Y.Ö.İ., Data Collection or Processing: E.C.C., M.A., F.G., Analysis or Interpretation: M.A., A.İ., F.G., Y.Ö.İ., Literature Search: E.C.C., A.İ., F.G., Writing: E.C.C., A.İ.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

References

1. Ermiş B, Ökten A, Zülfişkar B, Yılmaz K, İlter M, Söğüt A. Hemangiomas. *Türkiye Klinikleri J Med Sci.* 1996;16:423-6.
2. Liu B, Chen J, Luo J, Zhou F, Wang C, Xie L. Cavernous hemangioma of the testis mimicking a testicular teratoma. *Exp Ther Med.* 2013;6:91-2.
3. Kutsal C, Baloğlu İH, Albayrak AT. Hydrocele accompanying testicular cavernous hemangioma: A infant case report. *Int J Surg Case Rep.* 2021;82:105844.
4. Konya E, Uejima S, Ohnishi N, Sugiyama T, Kurita T. Venous hemangioma of the scrotum: a case report. *Hinyokika Kyo.* 2000;46:731-3.
5. Gotoh M, Tsai S, Sugiyama T, Miyake K, Mitsuya H. Giant scrotal hemangioma with azoospermia. *Urology.* 1983;22:637-9.
6. Stahl PJ, Tash JA, Poppas DP. Deep haemangioma of the scrotum as a rare presentation of scrotal mass in children. *BJU Int.* 2003;92(Suppl 3):e367.
7. Froehner M, Tsatalpas P, Wirth MP. Giant penile cavernous hemangioma with intrapelvic extension. *Urology.* 1999;53:414-5.
8. Iafrate M, Leone N, Tiengo C, Zattoni F. Surgical treatment of large hemangioma of the scrotum in a young adult male. *Arch Ital Urol Androl.* 2020;92:53-4.
9. Gangkak G, Mishra A, Priyadarshi S, Tomar V. Large Genital Cavernous Hemangioma: A Rare Surgically Correctable Entity. *Case Rep Urol.* 2015;2015:950819.
10. Djouhri H, Arrivé L, Bouras T, Martin B, Monnier-Cholley L, Tubiana JM. Diffuse cavernous hemangioma of the rectosigmoid colon: imaging findings. *J Comput Assist Tomogr.* 1998;22:851-5.